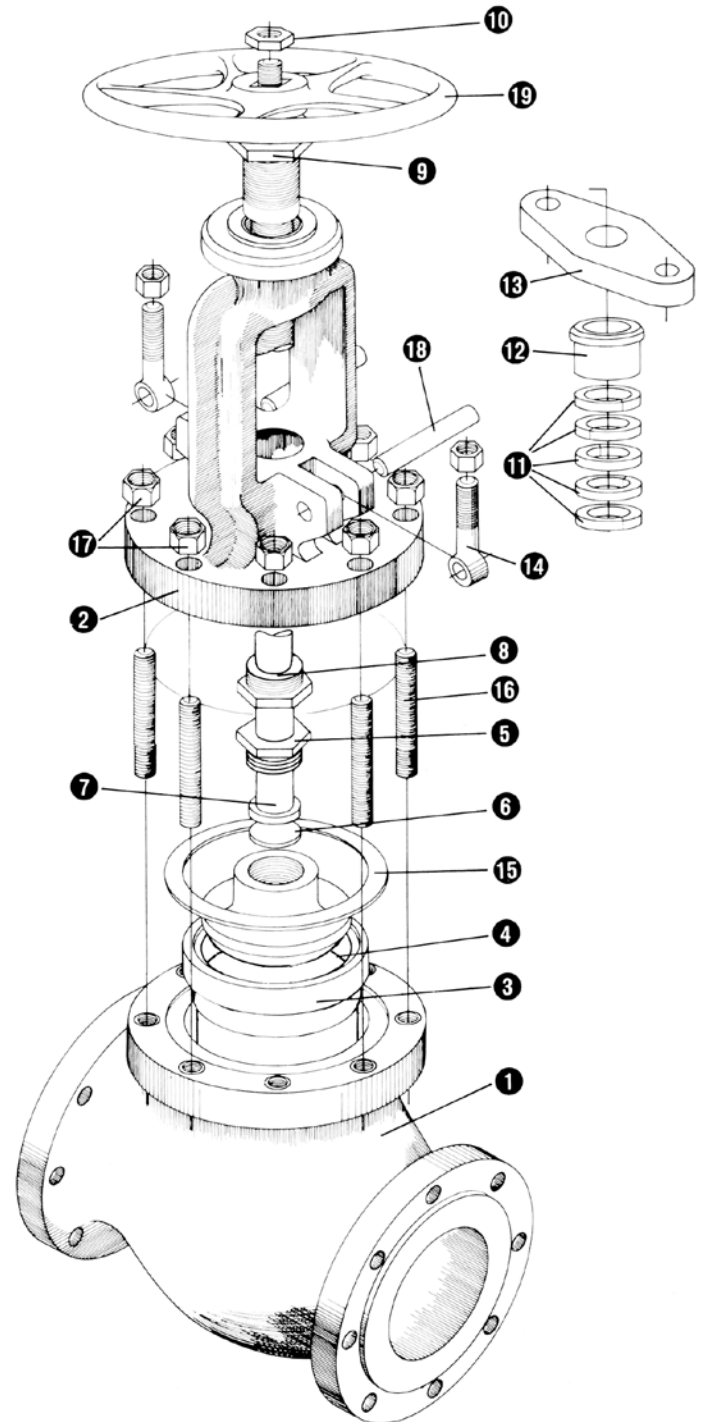


Typical Globe Valve Features

Crane globe valves are highly efficient for services requiring frequent operation and throttling when pressure drop across the valve is about 20% of inlet pressure. Closer throttling, creating higher pressure drops may cause cavitation or excessive velocities which could cause high noise levels, vibration and possible damage to the valve or adjacent piping. Globe valves can be equipped with optional operators and are available with a variety of trims to match service requirements.

1. **Body:** Body is cast with heavy sections reinforced at points subjected to the greatest stress. Valves are available in both flanged and butt welding ends. All conform to ASME specifications.
2. **Bonnet**
3. **Seat Ring**
4. **Disc**
5. **Disc Stem Nut:** Disc Stem Ring connects the disc to the stem, permitting the disc to swivel and aid in securing tight seating for trouble-free service.
6. **Disc Washer**
7. **Stem:** Stem has long engagement with yoke bushing for accurate seating.
8. **Bonnet Bushing**
9. **Yoke Bushing**
10. **Wheel Nut**
11. **Packing**
12. **Gland:** Gland is a two-piece, ball-type which exerts even pressure on the packing without binding the stem.
13. **Gland Flange**
14. **Gland Eye Bolts:** Eye bolts are securely fastened to the bonnet yet swing away to permit easy access to the stuffing box.
15. **Bonnet Gasket:** Bonnet gasket provides a positive seal against leakage. Class 150 and 300 valves have a male/female bonnet joint. A ring-type gasket is employed in Class 600.
16. **Bonnet Studs**
17. **Bonnet Nuts**
18. **Pin**
19. **Handwheel**



NOTE: Crane recommends the use of gear assistance for certain multi-turn valves for optimal functional performance in larger sizes and high flow-rate applications. Please refer to the note on specific product pages.

Class 150 • Outside Screw & Yoke • Bolted Bonnet

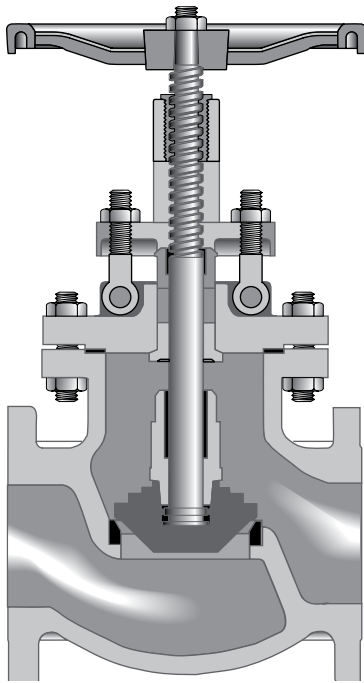


Figure 143

Flanged

Figure 143½

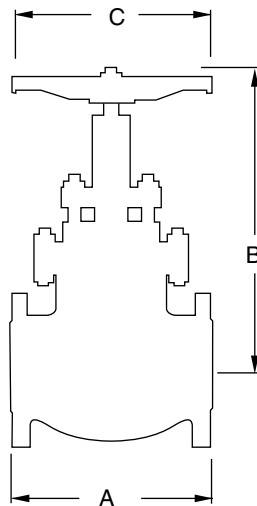
Butt Weld

Size Range:

2 through 12 inches
(50 - 300 mm)

Pressure Temperature Rating

Carbon Steel
ASTM A216 Grade WCB
285 psi @ -20°F to 100°F
(20 bar @ -28°C to 37°C)



Industry Standards

Steel Valves	ASME B16.34
Face-to-Face/End-to-End	ASME B16.10
Flange Dimensions	ASME B16.5
Weld End	ASME B.16.25
Testing	API 598

Material of Construction*

Description	Material
Body	WCB
Bonnet	WCB
Seat Rings	Hardfaced
Disc	13% CR Overlay
Stem	410 SS
Packing	Graphite
Bonnet Gasket	Corrugated Soft Steel or Steel/ Stainless Steel w/Graphite
Back Seat	410 SS
Disc Stem Nut	410 SS
Disc Washer	Carbon Steel
Gland	410 SS
Gland Flange	WCB
Eye Bolt	Steel
Eye Bolt Nuts	A563 Gr. A or O
Pins	-
Bonnet Studs	A193 Gr. B7
Bonnet Nuts	A194 Gr. 2H
Handwheel	WCB
Handwheel Nut	A194 Gr. 2H
I.D. Tags	SS
I.D. Pins	Steel

NOTES:

*Standard construction: WCB-Trim 8, other options are available. Crane recommends the use of manual or powered gear assistance for sizes 6" and larger.

Dimensions and Weights

Inches (millimeters) - pounds (kilograms)

Valves	2 (50)	2 ½ (65)	3 (80)	4 (100)	6 (150)	8 (200)	10 (250)	12 (300)
A	8.00 (203)	8.50 (216)	9.50 (241)	11.50 (292)	16.00 (406)	19.50 (495)	24.50 (622)	27.50 (698)
B (Open)	14 (356)	16 (406)	16 (406)	19 (482)	21 (533)	24 (610)	29 (736)	40 (1016)
C	8 (203)	8 (203)	10 (254)	12 (304)	14 (355)	18 (457)	20 (508)	24 (610)
Wt. (143)	48 (21)	70 (31)	92 (41)	132 (59)	223 (101)	355 (161)	640 (290)	1100 (498)
Wt. (143½)	49 (22)	60 (27)	84 (38)	137 (62)	230 (104)	350 (158)	680 (308)	1190 (539)

Class 300 • Outside Screw & Yoke • Bolted Bonnet

Material of Construction*

Description	Material
Body	WCB
Bonnet	WCB
Seat Rings	Hardfaced
Disc	13% CR Overlay
Stem	410 SS
Packing	Graphite
Bonnet Gasket	Stainless Steel spiral wound Graphite
Back Seat	410 SS
Disc Stem Nut	410 SS
Disc Washer	Carbon Steel
Gland	410 SS
Gland Flange	WCB
Eye Bolt	Steel
Eye Bolt Nuts	A563 Gr. A or O
Pins	-
Bonnet Studs	A193 Gr. B7
Bonnet Nuts	A194 Gr. 2H
Handwheel	WCB
Handwheel Nut	A194 Gr. 2H
I.D. Tags	SS
I.D. Pins	Steel

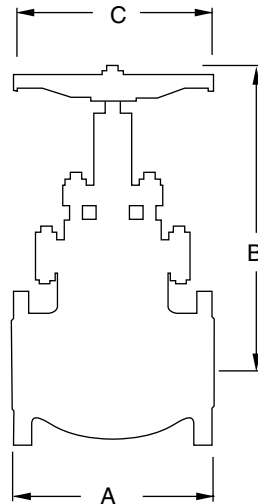
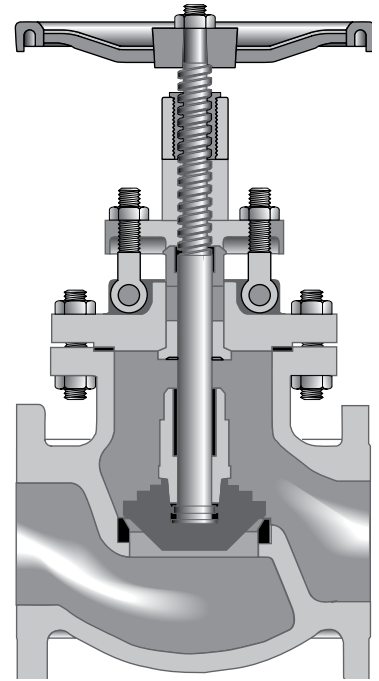
NOTES:
 *Standard construction: WCB-Trim 8, other options are available.
 Crane recommends the use of manual or powered gear assistance for sizes 6" and larger.

Figure 151
Flanged

Figure 151½
Butt Weld

Size Range:
 2 through 12 inches
 (50 - 300 mm)

Pressure Temperature Rating
 Carbon Steel
 ASTM A216 Grade WCB
 740 psi @ -20°F to 100°F
 (51 bar @ -28°C to 37°C)



Industry Standards

Steel Valves	ASME B16.34
Face-to-Face/End-to-End	ASME B16.10
Flange Dimensions	ASME B16.5
Weld End	ASME B.16.25
Testing	API 598

Dimensions and Weights

Inches (millimeters) - pounds (kilograms)

Valves	2 (50)	2½ (65)	3 (80)	4 (100)	6 (150)	8 (200)	10 (250)	12 (300)
A	10.50 (267)	11.50 (292)	12.50 (317)	14.00 (356)	17.50 (444)	22.00 (558)	24.50 (622)	28.00 (711)
B (Open)	15 (381)	18 (457)	18 (457)	21 (533)	25 (635)	36 (914)	41 (1041)	51 (1295)
C	8 (203)	10 (254)	10 (254)	14 (355)	18 (457)	22 (559)	24 (610)	25 (635)
Wt. (151)	69 (31)	99 (44)	128 (58)	190 (86)	330 (149)	330 (149)	700 (317)	1360 (616)
Wt. (151½)	62 (28)	73 (33)	124 (56)	181 (82)	340 (154)	530 (240)	710 (322)	1400 (635)

Class 600 • Outside Screw & Yoke • Bolted Bonnet

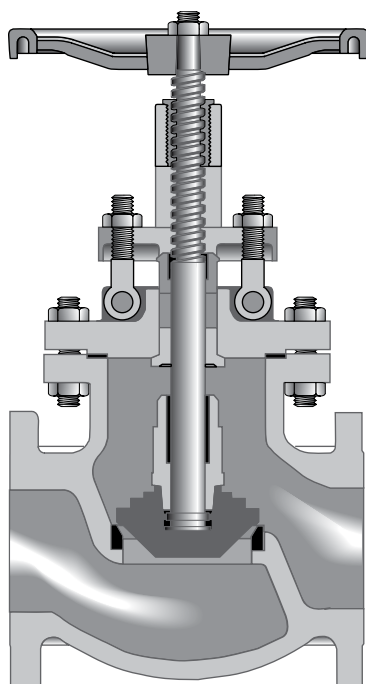
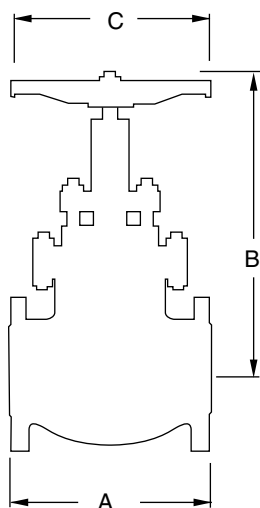


Figure 171
Flanged
Figure 171½
Butt Weld

Size Range:
2 through 8 inches
(50 - 200 mm)

Pressure Temperature Rating
Carbon Steel
ASTM A216 Grade WCB
1480 psi @ -20°F to 100°F
(102 bar @ -28°C to 37°C)



Industry Standards

Steel Valves	ASME B16.34
Face-to-Face/End-to-End	ASME B16.10
Flange Dimensions	ASME B16.5
Weld End	ASME B.16.25
Testing	API 598

Material of Construction*

Description	Material
Body	WCB
Bonnet	WCB
Seat Rings	Hardfaced
Disc	13% CR Overlay
Stem	410 SS
Packing	Graphite
Bonnet Gasket	Ring Type Joint
Back Seat	410 SS
Disc Stem Nut	410 SS
Disc Washer	Carbon Steel
Gland	410 SS
Gland Flange	WCB
Eye Bolt	Steel
Eye Bolt Nuts	A563 Gr. A or O
Pins	-
Bonnet Studs	A193 Gr. B7
Bonnet Nuts	A194 Gr. 2H
Handwheel	WCB
Handwheel Nut	A194 Gr. 2H
I.D. Tags	SS
I.D. Pins	Steel

NOTES:

*Standard construction: WCB-Trim 8, other options are available. Crane recommends the use of manual or powered gear assistance for sizes 4" and larger.

Dimensions and Weights

Inches (millimeters) - pounds (kilograms)

Valves	2 (50)	2½ (65)	3 (80)	4 (100)	6 (150)	8 (200)
A	11.50 (292)	13.00 (330)	14.00 (356)	17.00 (431)	22.00 (558)	26.00 (660)
B (Open)	19 (482)	21 (533)	23 (584)	27 (685)	33 (838)	36 (914)
C	10 (254)	10 (254)	14 (355)	18 (457)	20 (508)	26 (660)
Wt. (171)	126 (57)	154 (69)	188 (85)	270 (122)	890 (403)	990 (449)
Wt. (171½)	79 (35)	100 (45)	187 (84)	271 (122)	890 (403)	990 (449)